

Claims

1. Bound printed matter comprising one or more interlaced images printed on one or more pages, said interlaced image(s) comprising two or more basic images, wherein, said basic images are successively viewable by means of a decoder, said decoder comprising:
at least one lenticular panel, having one planar surface and an array of lenticular lenses on the other surface;
wherein said lenticular panel is separate from said printed matter.
2. Bound printed matter according to claim 1, further comprising means for moving said lenticular panel relative to said image.
3. Bound printed matter according to claim 1, wherein the decoder additionally comprises means for aligning the lenticular panel with the interlaced image printed on the page.
4. Bound printed matter according to claim 1, further comprising reference marks for alignment created on the pages.
5. Bound printed matter according to claim 4, wherein the decoder further comprises means for aligning the panel with the reference marks.

6. Bound printed matter according to claim 1, wherein the pitch of the lines of print in the interlaced image is constant.
7. Bound printed matter according to claim 1, wherein the pitch of the lines of print in at least a portion of the interlaced image is variable.
8. In combination, printed matter comprising one or more interlaced images printed on one or more of its pages, each of said interlaced image(s) comprising two or more basic images, and a decoder for successively viewing said basic images, said decoder comprising:
at least one lenticular panel, having one planar surface and an array of lenticular lenses on the other surface;
wherein said lenticular panel is separate from said printed matter.
9. A combination, according to claim 8, wherein the decoder further comprises means for moving the lenticular panel relative to the image and/or means for aligning said lenticular panel with said interlaced image printed on said page.
10. A combination, according to claim 8, wherein the printed matter further comprises reference marks for alignment created on the pages.

11. A combination, according to claim 10, wherein the decoder further comprises means for aligning the lenses with the reference marks on the page.

12. A method for distributing masked images, comprising:

- printing an interlaced image on a substrate; and
- decoding said interlaced image using a decoder comprising at least one lenticular panel, said lenticular panel having one planar surface and a linear array of lenticular lenses on the other surface;

wherein said lenticular panel is separate from said substrate.

13. A method according to claim 12 wherein the lenticular panel is movable relative to the interlaced image.

14. A decoder for interlaced images on a page of bound printed matter, said decoder comprising:

- at least one lenticular panel, having one planar surface and an array of lenticular lenses on the other surface;
- optionally means for moving said lenticular panel relative to said image;
- optionally means for aligning said lenticular panel with said interlaced image printed on said page; and
- optionally means to hold said decoder to said page;

wherein said lenticular panel is separate from said page.

15. A decoder according to claim 14, further comprising a frame.

16. A decoder according to claim 15, wherein the frame is rigid.

17. A decoder according to claim 16, wherein the array of lenses is moveably attached to the rigid frame.

18. A decoder according to claim 17, further comprising means for moving the lenticular panel relative to the rigid frame.

19. A decoder according to claim 15, further comprising means for aligning the rigid frame with the interlaced image printed on the page.

20. A decoder according to claim 14, wherein the array of lenticular lenses is essentially linear.

21. A decoder according to claim 14, wherein the pitch of the lenses on the lenticular panel is constant.

22. A decoder according to claim 14, wherein the pitch of the lenses on at least a portion of the lenticular sheet is variable.

23. A decoder according to claim 14, wherein the front surface of the lenticular sheet is coated with an anti-reflection layer.
24. A decoder according to claim 15, wherein the frame comprises one wing.
25. A decoder according to claim 15, wherein the frame comprises two wings.
26. A decoder according to claim 19, wherein the alignment means are chosen from the group comprised of, but not limited to the following:
 - printed guide lines viewed through the lenticular sheet;
 - printed dots on the page viewed through holes in the decoder;
 - pins protruding from the bottom of the decoder that enter holes in the pages;
 - magnets on the decoder that are attracted to marks printed on the page using ink containing metallic particles; and
 - an electric circuit on the decoder comprising LEDS and gaps in the wiring, said gaps being closed by appropriately placed conducting elements on the page.
27. A decoder according to claim 25, wherein the upper wing of the frame comprises a lenticular panel and the means for moving said lenticular

panel relative to said frame and the lower wing of said frame comprises a planar firm surface, and wherein the page is inserted between said lenticular panel and said planar firm surface.

28. A decoder according to claim 27, wherein the lower wing further comprises a resilient mat.

29. A decoder according to claim 16, further comprising a time-release mechanism for controlling the motion of the lenticular panel relative to the rigid frame.

30. A decoder according to claim 14, comprising means for slidably displacing the lenticular panel over the interlaced image.

31. A decoder according to claim 30, wherein the means to slidably displace the lenticular panel comprise roller means.

32. A decoder according to claim 30, wherein the roller means comprise a rotatable axis provided with contact points on its surface to create a friction with the surface of the pages upon rotation, thereby to cause a displacement of said panel.

33. A decoder according to claim 32, wherein the contact points are ring-like in shape.
34. A decoder according to claim 32, wherein the contact points are non continuous protrusions.
35. A decoder according to claim 32, wherein the contact points are made of a high-friction material.
36. A decoder according to claim 31, wherein the roller means are actuatable by hand.
37. A decoder according to claim 36, wherein the roller means are actuatable by the pressure of a finger.
38. A decoder according to claim 32, wherein the rotatable axis is supported by two supports at its extremities.
39. An interlaced image as claimed in any one of claims 1 to 12, which is added to a page of a bound printed matter by adding a sticker or by placing the interlaced image on top of a page and/or of an existing image in any other way and by any other means.

40. A sticker comprising an interlaced image.

41. A decoder according to claim 14, wherein the holding means are chosen from the group comprised of, but not limited to the following:

- manually pressing the decoder against the page;
- weak glue;
- clips; and
- magnets.

42. A decoder according to claim 14, further comprising a planar firm surface, wherein the page is inserted between the lenticular sheet and said planar firm surface.

43. A decoder according to claim 25, further comprising an arrangement of magnets and complementary iron discs configured to keep the frame in the open or closed position.

44. A decoder for successively viewing the basic images of which an interlaced image printed on a surface is composed, said decoder comprising:

- a. a lenticular panel, having an array of lenticular lenses on at least one surface; and

b. means for establishing and maintaining the required alignment between said interlaced image and said lenticular panel;

wherein said means for establishing and maintaining the required alignment between said interlaced image and said lenticular panel comprise one or more contact surfaces located along the length of the outer edge of said panel and projecting downward from its lower surface, said contact surfaces being selected from static or moving surfaces or a combination thereof.

45. A decoder according to claim 44, wherein the surface is a page of bound printed material.

46. A decoder according to claim 44 further comprising displacement means for slidably displacing the lenticular panel relative to the interlaced image.

47. A decoder according to claim 44, wherein the contact surface is stationary.

48. A decoder according to claim 44, wherein the contact surface is formed from a single long strip.

49. A decoder according to claim 44, wherein the contact surfaces are formed from two or more tabs.

50. A decoder according to claim 44, wherein the contact surface is rotating.

51. A decoder according to claim 46, wherein the displacement means to slidably displace the lenticular panel relative to the interlaced image comprise roller means.

52. A decoder according to claim 51, wherein the roller means comprise a wheel attached to rotatable axis and supported by supports at its extremities.

53. A decoder according to claim 52, wherein the wheel has a diameter such that, when the lower planar surface of said decoder is in intimate contact with the surface on which the interlaced image is printed, the outer circumference of said wheel is also in contact with said surface.

54. A decoder according to claim 51, wherein at least the outer circumference of the wheel is provided with a suitable outer surface such that, upon rotation of said wheel, a frictional force is created between said wheel and the surface on which the interlaced image is printed.

55. A decoder according to claim 54, wherein the suitable outer surface is a layer of rubber.

56. A decoder according to claim 54, wherein the suitable outer surface is an array of small protrusions.

57. A method of using the decoder of claims 44 or 46 to successively view the basic images of which an interlaced image printed on surface is composed, said method comprised of the following steps:

- a. placing said decoder over said interlaced image on said surface;
- b. pushing said decoder against said surface so that the means for establishing and maintaining the required alignment between said interlaced image and the lenticular panel are in intimate contact with the edge of said surface; and
- c. slidably displacing said lenticular panel relative to said interlaced image.

58. A method according to claim 57, wherein the lenticular panel is slidably displaceable by manually sliding the decoder on the surface.

59. A method according to claim 57, wherein the lenticular panel is slidably displaceable by activating the displacement means.

60. A method according to claim 59, wherein activating the displacement means for slidably displacing the lenticular panel relative to the interlaced image comprises rotating a wheel attached to the decoder.

61. A decoder for interlaced images on a page of a wall calendar comprising:

- a rigid back part attachable to a substantially vertical surface;
- a lenticular panel, having one planar surface and an array of lenticular lenses on the other surface, moveably attached to said back part;
- optional means for moving said lenticular panel relative to said back part; and
- means for maintaining said lenticular panel in alignment with said lines of print.

62. A decoder according to claim 61, wherein the means for moving the lenticular panel relative to the back part is a motor having an eccentric cam on its shaft.

63. A decoder according to claim 62, wherein the motor is actuated by an energy source chosen from the following group:

1. battery;
2. solar energy; and
3. electric mains power.

64. A decoder according to claim 61, wherein the pitch of the lenses on the lenticular panel is constant.

65. A decoder according to claim 61, wherein the pitch of the lenses on at least a portion of the lenticular sheet is variable.

66. A decoder according to claim 61, wherein the front surface of the lenticular sheet is coated with an antireflection layer.

67. A wall calendar comprising one or more interlaced images printed on its pages, said interlaced images comprising two or more basic images wherein, said basic images are successively viewed by means of a decoder, said decoder comprising:

- a rigid back part attachable to a substantially vertical surface;
- a lenticular panel, having one planar surface and an array of lenticular lenses on the other surface, moveably attached to said back part;
- optional means for moving said lenticular panel relative to said back part;
- means for maintaining said lenticular panel in alignment with said lines of print.

68. A wall calendar according to claim 67, wherein the pitch of the lines of print in the interlaced image is constant.

69. A wall calendar according to claim 67, wherein the pitch of the lines of print in at least a portion of the interlaced image is variable.

70. In combination, a wall calendar comprising one or more interlaced images printed on its pages, said interlaced image comprising two or more basic images and a decoder for successively viewing said basic images, said decoder comprising:

- a rigid back part attachable to a substantially vertical surface;
- a lenticular panel, having one planar surface and an array of lenticular lenses on the other surface, moveably attached to said back part;
- optional means for moving said lenticular panel relative to said back part; and
- means for maintaining said lenticular panel in alignment with said lines of print.